

SMM 21103 L

High Contrast Gray Scale Monitor



- CRT with anti-reflective and anti-static panel and dispenser cathode for long CRT life
- Automatic calibration of black level without external sensor, 20 minutes after power on and every 12 hours
- Constant Gamma for equal gray scale performance in multi monitor configurations, also over complete lifetime of CRT
- High contrast and brightness/ high resolution CRT, up to 235 fL (800 cd/m^2), front-of-screen luminance through 32 % total transmission
- 1600 x 1280 addressability standard
- Scan range of 30 to 92 kHz horizontal and 50 to 120 Hz vertical
- Microprocessor control of all internal monitor functions
- Front panel brightness, contrast and geometry controls are standard and can be disabled for calibrated diagnostic applications
- Front panel control for image rotation
- Ambient light sensor for automatic contrast control

display SOLUTIONS

Siemens SMM-Series of gray scale monitors is designed to meet the demanding requirements of Medical Diagnostic Imaging.

The monitor features high resolution at high luminance with low background levels for wide dynamic range.

The internal microprocessor controls all electrical and magnetic monitor functions, and continuously adjusts drive

levels to maintain constant luminance during warm up and over long life of the CRT depending on the environmental light conditions. For each format stored, the dynamic focus ensures optimal sharpness at any point of the screen. All formats are stored internally, including a full set of screen settings for each. Formats are selected and modified through the RS 232 serial port.

SIEMENS

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Technical Data		
Power requirements		Display performance
Input voltage	94 to 264 V Wide range power supply	Display area (W x H) in mm 400 x 300
Power frequency	47 to 63.6 Hz	< 2 %
Power consumption	Approx. 150 W	Non-linearity 0.05 mm max. swim & jitter
Power factor control	According to EN 61 000	Raster stability P45: ≥ 235 fL @ 0.7 V _{pp}
Power saving	According to VESA DPMS	Maximum luminance input signal
CRT specifications		High voltage regulation 0.2 % max. size change
Size	54 cm / 21", flat & square (landscape)	
Deflection angle	90 °	
Light transmission	32 %	
Phosphor type	P45, cadmium free	
Surface	Multicoated conductive panel (AR/AS)	
Gun system	Dispenser cathode (long life)	
Focus	Static and dynamic	
General performance		
Horizontal frequency	30 to 92 kHz	
Vertical frequency	50 to 120 Hz	
Formats	19 max., self recognizing and auto-scaling	
Video amplifier, inputs		
Type	High contrast, high resolution supports 280 MHz pixel-clock	
Connectors	BNC type	
Impedance	75 Ω	
Video level	0.75 to 1.2 V _{pp}	
Sync level	0.1 to 0.6 V _{pp}	
Front panel controls		
Controls	Power on/off, contrast, brightness	
Geometry	H/V-phase, H/V-amplitude, pin & barrel, image rotation	
Ambient light sensor	For automatic contrast control	
Operation conditions		
Temperature	10 °C to 35 °C, up to 40 °C with some restrictions	
- Operating	-25 °C to +70 °C	
- Storage		
Humidity, rel.	20 % to 80 %	
- Operating	20 % to 80 %	
- Storage		
Mechanical specifications		
Dimensions (W x H x D) in mm	499 x 483 x 520	
Weight	Approx. 33 kg	
Approvals		
Safety	EN 60 950, UL 1950, cUL, DHHS	
EMC	FCC Class A, MPR II, EN 60 601-1-2 Class B	
- Emission		
Others	CE Mark Medical Device Class I EN ISO 9001, EN ISO 13 485 certified plant	
Options		
- OEM versions		
- Other phosphors available		
Miscellaneous	Customer specific labeling available	
Ordering data	Order No.	
SMM 21103 L	6GF6300-1BD	